

CLAIMS

What is claimed is:

1 1. A method, comprising:

2 receiving an AAL5 CPCS-SDU at a router;

3 encapsulating the AAL5 CPCS-SDU into an AAL5 enhanced packet at the
4 router;

5 generating an MPLS packet from the AAL5 enhanced packet, wherein the

6 AAL5 enhanced packet comprises an ATM header; and

7 routing the MPLS packet over an MPLS network.

1 2. The method of claim 1, wherein the AAL5 enhanced packet further
2 comprises:

3 an MPLS label stack;

4 a control word; and

5 an AAL5 CPCS-SDU.

1 3. The method of claim 2, wherein the router is a label switch router.

1 4. The method of claim 2, wherein the router is a label edge router.

1 5. The method of claim 2, further comprising:

2 receiving secondary SDUs of layer 2 protocols at the router, wherein the

3 layer 2 protocols comprise Frame Relay, ATM Cell, Ethernet, and SONET.

1 6. A method comprising:

receiving an MPLS packet at a router;
decapsulating the MPLS packet when the MPLS packet is an AAL5 enhanced packet;
producing an AAL5 CPCS-SDU from the AAL5 enhanced packet, wherein the AAL5 enhanced packet comprises an ATM header.

7. The method of claim 6, wherein the AAL5 enhanced packet further comprises:

an MPLS label stack;
a control word; and
an AAL5 CPCS-SDU.

8. The method of claim 7, wherein the router is a label switch router.

9. The method of claim 7, wherein the router is a label edge router.

10. The method of claim 7, further comprising:

generating secondary SDUs of layer 2 protocols from the MPLS packet at the router, wherein the layer 2 protocols comprise Frame Relay, ATM Cell, Ethernet, and SONET.

11. A computer readable medium having stored thereon a plurality of instructions, said plurality of instructions when executed by a computer, cause said computer to perform:
receiving an AAL5 CPCS-SDU at a router;
encapsulating the AAL5 CPCS-SDU into an AAL5 enhanced packet at the router;

7 generating an MPLS packet from the AAL5 enhanced packet, wherein the
8 AAL5 enhanced packet comprises an ATM header; and
9 routing the MPLS packet over an MPLS network.

1 12. The computer-readable medium of claim 11, wherein the AAL5
2 enhanced packet further comprises:
3 an MPLS label stack;
4 a control word; and
5 an AAL5 CPCS-SDU.

1 13. The computer-readable medium of claim 12, wherein the router is a
2 label switch router.

1 14. The computer-readable medium of claim 12, wherein the router is a
2 label edge router.

1 15. The computer-readable medium of claim 12 having stored thereon
2 additional instructions, said additional instructions when executed by a
3 computer, cause said computer to further perform:
4 receiving secondary SDUs of layer 2 protocols at the router, wherein the
5 layer 2 protocols comprise Frame Relay, ATM Cell, Ethernet, and SONET.

1 16. A computer readable medium having stored thereon a plurality of
2 instructions, said plurality of instructions when executed by a computer, cause
3 said computer to perform:
4 receiving an MPLS packet at a router;

5 decapsulating the MPLS packet when the MPLS packet is an AAL5
6 enhanced packet;
7 producing an AAL5 CPCS-SDU from the AAL5 enhanced packet, wherein
8 the AAL5 enhanced packet comprises an ATM header.

1 17. The computer-readable medium of claim 16, wherein the AAL5
2 enhanced packet further comprises:
3 an MPLS label stack;
4 a control word; and
5 an AAL5 CPCS-SDU.

1 18. The computer-readable medium of claim 17, wherein the router is a
2 label switch router.

1 19. The computer-readable medium of claim 17, wherein the router is a
2 label edge router.

1 20. The computer-readable medium of claim 12 having stored thereon
2 additional instructions, said additional instructions when executed by a
3 computer, cause said computer to further perform:
4 generating secondary SDUs of layer 2 protocols from the MPLS packet at
5 the router, wherein the layer 2 protocols comprise Frame Relay, ATM Cell,
6 Ethernet, and SONET.

1 21. A system, comprising:
2 means for receiving an AAL5 CPCS-SDU at a router;

3 means for encapsulating the AAL5 CPCS-SDU into an AAL5 enhanced
4 packet at the router;
5 means for generating an MPLS packet from the AAL5 enhanced packet,
6 wherein the AAL5 enhanced packet comprises an ATM header; and
7 means for routing the MPLS packet over an MPLS network.

1 22. The system of claim 21, wherein the AAL5 enhanced packet further
2 comprises:

3 an MPLS label stack;
4 a control word; and
5 an AAL5 CPCS-SDU.

1 23. The system of claim 22, wherein the router is a label switch router.

1 24. The system of claim 22, wherein the router is a label edge router.

1 25. The system of claim 22, further comprising:

2 means for receiving secondary SDUs of layer 2 protocols at the router,
3 wherein the layer 2 protocols comprise Frame Relay, ATM Cell, Ethernet, and
4 SONET.

1 26. A system comprising:

2 means for receiving an MPLS packet at a router;
3 means for decapsulating the MPLS packet when the MPLS packet is an
4 AAL5 enhanced packet;
5 means for producing an AAL5 CPCS-SDU from the AAL5 enhanced
6 packet, wherein the AAL5 enhanced packet comprises an ATM header.

1 27. The system of claim 26, wherein the AAL5 enhanced packet further
2 comprises:

3 an MPLS label stack;
4 a control word; and
5 an AAL5 CPCS-SDU.

1 28. The system of claim 27, wherein the router is a label switch router.

1 29. The system of claim 27, wherein the router is a label edge router.

1 30. The system of claim 27, further comprising:
2 means for generating secondary SDUs of layer 2 protocols from the MPLS
3 packet at the router, wherein the layer 2 protocols comprise Frame Relay, ATM
4 Cell, Ethernet, and SONET.

1 31). A router, comprising:
2 a processor; and
3 memory connected to the processor storing instructions for AAL5
4 enhanced encapsulation executed by the processor;
5 wherein the processor performs the enhanced AAL5 encapsulation, by
6 receiving an AAL5 CPCS-SDU;
7 encapsulating the AAL5 CPCS-SDU into an AAL5 enhanced packet;
8 generating an MPLS packet from the AAL5 enhanced packet, wherein the
9 AAL5 enhanced packet comprises an ATM header; and
10 routing the MPLS packet over an MPLS network.

1 32. The router of claim 31, wherein the AAL5 enhanced packet further
2 comprises:

3 an MPLS label stack;
4 a control word; and
5 an AAL5 CPCS-SDU.

1 33. The router of claim 32, wherein the router is a label switch router.

1 34. The router of claim 32, wherein the router is a label edge router.

1 35. The router of claim 32, wherein the processor further performs:
2 receiving secondary SDUs of layer 2 protocols, wherein the layer 2
3 protocols comprise Frame Relay, ATM Cell, Ethernet, and SONET.

1 36. A router comprising:
2 a processor; and
3 memory connected to the processor storing instructions for AAL5
4 enhanced decapsulation executed by the processor;
5 wherein the processor performs the AAL5 enhanced decapsulation, by
6 receiving an MPLS packet;
7 decapsulating the MPLS packet when the MPLS packet is an AAL5
8 enhanced packet;
9 producing an AAL5 CPCS-SDU from the AAL5 enhanced packet, wherein
10 the AAL5 enhanced packet comprises an ATM header.

1 37. The router of claim 36, wherein the AAL5 enhanced packet further
2 comprises:

3 an MPLS label stack;
4 a control word; and
5 an AAL5 CPCS-SDU.

1 38. The router of claim 37, wherein the router is a label switch router.

1 39. The router of claim 37, wherein the router is a label edge router.

1 40. The router of claim 37, wherein the processor further performs:
2 generating secondary SDUs of layer 2 protocols from the MPLS packet,
3 wherein the layer 2 protocols comprise Frame Relay, ATM Cell, Ethernet, and
4 SONET.